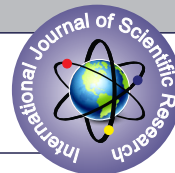


EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PSYCHOLOGICAL ASPECTS OF AGING AND ITS COPING STRATEGIES AMONG GERIATRIC INDIVIDUALS IN SELECTED URBAN AREAS: A QUASI-EXPERIMENTAL STUDY



Nursing

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ABSTRACT

Aim of study: Effectiveness of structured teaching program on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals in the selected urban areas: - A Quasi Experimental Study. **Objective of study: -Primary Objective:** To evaluate the effectiveness of the structured teaching Program on knowledge regarding psychological aspects of aging and its Coping strategies among geriatric individuals. **Secondary Objectives:** To assess the existing knowledge score of geriatric Individuals regarding psychological aspects of aging and its coping strategies in selected urban areas. To determine the associations of post-test knowledge score of geriatric individuals with selected demographical variables. **Method:** A quantitative, one group pre-test, post -test research design was adopted. A total 100 Geriatric individuals above the age of 60 years were selected using a non-probability convenience sampling technique and pre-test and post -test knowledge score were measured using self-structured questionnaire. Data were analyzed using descriptive and inferential statistics (paired t-test and chi-square test.) **Results:** To assess the effectiveness of the Structured Teaching Program (STP) on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals, a paired t-test was conducted. The pre-test average score was 13.66 ± 3.002 , while the post-test average score increased to 20.83 ± 3.091 . The tabulated t-value for $n = (100-1)$, i.e., 99 degrees of freedom, at a 5% level of significance (two-tailed) is 1.984. The calculated t- value was 16.637, and the significance level (p-value) was 0. 000. As the calculated t-value is much higher than the tabulated value at the 5% level of significance, the results are statistically significant. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, confirming that the Structured Teaching Program (STP) was effective in significantly improving participants' knowledge regarding psychological aspects of aging and its strategies. **Conclusion:** - After the detailed analysis, the findings of this quasi-experimental study affirm that structured teaching programs are effective in enhancing knowledge regarding the psychological aspects of aging and promoting effective coping strategies among geriatric individuals in urban Areas. As the elderly population continues to grow, such interventions will play a crucial role in promoting mental well-being and healthy aging, ultimately reducing the societal and economic burden of geriatric psychological morbidity.

KEYWORDS

Effectiveness, structured teaching program, knowledge, psychological aspects of aging, coping strategies, Geriatric individuals, selected urban areas.

INTRODUCTION

"Growing old: psychological Aging" explores the cognitive and emotional changes that accompany aging. As individuals age, they may experience decline in certain cognitive abilities, such as memory, perception and reasoning, often leading to misconception that all older adults face significant cognitive challenges. However, not all types of memory are equally affected; older individuals often retain important and meaningful information. While some cognitive decline is common, factors, such as physical health, education, and mental engagement can mitigate these effects, learning and thriving well into their later years.^[1]

Old age is the range of ages for people for people nearing and surpassing life expectancy. People of old age called old people, old-times, the elderly, elders, seniors, or older adults. Old age is not a define biological stages: the chronological age denoted as 'old age' varies culturally and historically, some disciplines and domains focus on the aging and the aged, such as the organic processes of aging, medical studies of the aging processes (gerontology) disease that afflict older (geriatric) technology to support the aging society (technology), and leisure and sport activities adapted to older (such as senior sport)^[2]

Globally, the population aged 60 years and above is expected to double from 1 billion in 2020 to 2.1 billion by 2050, highlighting an urgent need to address the mental health and psychological well-being of the elderly. In India, the elderly population (60 years and above) reached around 138 million in 2021 and is projected to grow significantly in the coming decades (Ministry of Statistics and Program Implementation, 2021). In Maharashtra, one of India's largest states, elderly individuals account for approximately 10% of the total population, with studies

reporting that nearly 20-30% suffer from moderate to severe psychological issues like depression, anxiety or stress-related disorders.^[3]

Psychology stress and coping in aging, Richard s Lazarus, Anita Delongis, American psychologist 38(3), 245, 1983 Examine how the dynamics of stress and coping change with the circumstance of living and the process of aging. The answer has remained obscure for 3 main reasons. The state of the art in the measurement of stress and coping is still primitive, personal belief, value commitments, which develop from a person's unique history, shape appraisal of stress and how stress is coped with and there have profound consequences for moral, social and work functioning and somatic Health coping strategies are integral in helping older adults maintain a sense of control, dignity and independence. Effective coping strategies can mitigate the adverse psychological effects of aging, foster better mental health and improve the quality of life for elderly individuals.^[4]

BACKGROUND OF THE STUDY

The psychological problems and coping strategies and coping strategies of elderly persons residing in selected old age. The general characteristics of old age are physical and psychological changes which bring disabilities. They face number of problems such as dependency, ill health, absence of social security, loss of social role and recognition and non-availability of opportunity for creative use of leisure. With the advent of the nuclear family, urbanization, influence of western culture and changes of lifestyle there is no space for elders in the family and may go for institutionalization. Separation from or loss of assistance from their children makes them physically and emotionally neglected that lead to psychological problem like anxiety,

depression, loneliness, feeling of insecurity, social isolation etc^[5]

Yashvi, (2021). Resilience in older Adults: -The concept of resilience in older adults was born out of the paradox of old age. The Paradox is that in spite of losses and physical decline experienced in later life, older people report feeling content, and they have lower rates of psychotherapy than the other population. Specialists have contended that this is because of flexibility and that comprehension of versatility can prompt better, more joyful individuals and networks.^[6]

Promoting Psychological well-being is significantly associated with healthy ageing among older adults in India ($\beta=1.56$; 95% CI: 1.35–1.76). In addition, healthy ageing is also associated with the lifestyle behaviors like physical activity, smoking and drinking history. The present study highlights the importance of promoting psychological wellbeing and healthier lifestyle for better health outcome among the older population in India. Because, with increasing age, as the health status among individual's decline, promoting a positive self-perception of ageing is equally important in facilitating healthy ageing as that of promoting healthier lifestyle.^[7]

Effective coping strategies for older adults include engaging in social activities, pursuing hobbies, practicing mindfulness, maintaining physical health, and seeking psychology support. However, older adults often require structured guidance and motivation to integrate these strategies into their daily lives.

NEED FOR THE STUDY:

According to the **World Health Organization (2019-2023)**, By 2030, 1 in 6 people in the world will be aged 60 years or over. At this time the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion. By 2050, the world's population of people aged 60 years and will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million.

Mental Health is an essential component of overall well-being, especially in later life when individuals face a unique set of stressors and challenges. The aging process is not only marked by physiological decline but also by significant psychosocial transition -including retirement, bereavement, reduced functional independence, shifting family roles, and social isolation. According to the world Health Organization (WHO) around 14% of individuals aged 60 years and older live with a mental disorder, yet a large proportion of them remain undiagnosed and untreated due to stigma, lack of awareness, and limited access to mental health services^[8]

REVIEW OF LITERATURE:-

A study was conducted on evaluator research approach was find out the effectiveness of STP on psychological aspects of aging and its coping strategies among geriatric individuals is pre-experimental one group, pre-test post-test design (2023-24). To assess the effectiveness of the Structured Teaching Program (STP) on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals. After the detailed analysis, the findings of this quasi-experimental study affirm that structured teaching programs are effective in enhancing knowledge regarding the psychological aspects of aging and promoting effective coping strategies among geriatric individuals in urban Areas. Research Methodology: In depended variables in this study independent variable is structured teaching program on psychological aspects of aging and its coping strategies among geriatric individuals. Depended variables: structured teaching program. Data collection: Demographic variables and structured knowledge questionnaire were developed. Results: Descriptive and inferential statistics.

HYPOTHESIS:-

H0 – There will be no significant difference between effectiveness of structured teaching program on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals after pre-test and post-test.

H1- There will be significant difference between effectiveness of structured teaching program on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals after pre-test and post-test.

METHODOLOGY:-

Research approach:

A quantitative research approach was adopted to evaluate the

effectiveness of the structured teaching programme.

Research Design:

A quasi -experimental study one -group, pre-test post-test design was used to assess knowledge improvement among geriatric individuals.

Setting of study:

The study was conducted in selected urban areas.

POPULATION:

The population in the study was Geriatric individuals.

Target population:

In this study the target population was geriatric individuals in selected urban areas.

Accessible population:

In this study, the accessible population was geriatric individuals in selected urban areas and are available during data collection who were fulfilling the inclusive criteria.

Sample size and sampling Techniques:

Sample size: 100 sample size

Sample size formula:

Cochran formula

$$N = Z^2 P(1-P) / d^2$$

N-population size=100

Confidence level (Z) –1.96, (z score- 0.05)

d= desired error of margin 10%=0.10

Sample Proportion (P)= 65%, 65/100=0.65

Q=(1-p) The probability of failure

$$Q = (1-p), 1-0.65 = 0.35$$

$$N = Z^2 p(1-p) / d^2$$

$$N = 1.96^2 * 0.65 * (1-0.65) / 0.10^2$$

$$= 87.39$$

=The sample size has been increased by 10% to meet out non-response or compliance.

$$= \text{The actual sample size } 87.39 + 10\% \text{ of } 87.39 = 87.39 + 8.73 = 96.12$$

=100 participants needed in the study.

Sampling Technique:

Sampling technique used in this study is non-probability convenience sampling.

SAMPLING CRITERIA:

Inclusion criteria: Geriatric individuals who are

1. Geriatric Individuals above the age 60 Years.
2. Residing in selected urban areas.
3. Willingness to participate in the structured teaching program.
4. Who are able to read and write English, Marathi and Hindi.

Exclusion criteria: Geriatric individuals who are

1. Geriatric Individuals below the age of 60 years.
2. Residing in Rural or Remote areas.
3. Those who are not willing to participate in the study.
4. Those who participated in pilot study.

TOOL FOR DATA COLLECTION:

A self-administered structured questionnaire was used to assess participants' knowledge. The tool was developed based on the investigator's theoretical knowledge, clinical experience, extensive literature review, and expert consultation. It consisted of 30 multiple-choice questions, each with four options. A score of 1 was awarded for each correct response, while incorrect or unanswered items were scored as 0. The maximum possible score was 30, and participants' knowledge levels were categorized from poor to excellent based on the obtained scores.

SECTION:-

Section A: Demographic data

It comprised of 9 items seeking information on demographic data such as age, gender, educational status, monthly income, whether having pension, religion, type of family, and are you suffering from any systemic disease.

Section B: Questionnaire to assess level of knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals

Categorization level of knowledge

Sr. no	Score Range	Level
1.	1-6	Poor
2.	7-12	Average
3.	13-18	Good
4.	19-24	Very Good
5.	25-30	Excellent

Contain validity: The tool's validity was assessed by 21 experts, including mental health nursing experts, physician, and statistics and Marathi literature teacher. After validation, 20 tools were received, with valuable suggestions given by experts.

The Reliability of the tool was calculated using Karl Pearson's coefficient correlation formula, with a correlation coefficient (r) of 0.8379. As $r > 0.5$ it is significant. hence the tool was found to be reliable.

Pilot study: Permission was taken from concerned authority. Pilot study was conducted from 03/01/25 to 10/1/25 for a period of 7 days.

Main study.: The main study data was gathered from on date 03/02/2025 to 04/3/2025. Permission was obtained from the ward member of that area.

Plan for Data Analysis.: The data was decided to be analyzed by both descriptive and inferential statistics on the basis of objectives of the study. To compare the data a master data sheet was prepared by the investigator including: Descriptive statistics (frequency, percentage and standard Deviation), and inferential statistics (paired t-test and chi-square test) will be used for analysis. The investigator will do analysis manually as well as will use appropriate statistical package for analysis.)

ETHICAL CONSIDERATION:

The research proposal was approved by the institutional ethical committee prior to the commencement of the study. Permission to conduct the study was obtained from the concerned college authorities. Written informed consent was secured from all participants, and confidentiality and anonymity were strictly maintained throughout the study. The self-respect and dignity of the participants were upheld at all times during the research process.

RESULTS

To assess the effectiveness of the Structured Teaching Program (STP) on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals, a paired t-test was conducted. The pre-test average score was 13.66 ± 3.002 , while the post-test average score increased to 20.83 ± 3.091 . The tabulated t-value for $n = (100 - 1)$, i.e., 99 degrees of freedom, at a 5% level of significance (two-tailed) is 1.984. The calculated t-value was 16.637, and the significance level (p-value) was 0.000. As the calculated t-value is much higher than the tabulated value at the 5% level of significance, the results are statistically significant. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, confirming that the Structured Teaching Program (STP) was effective in significantly improving participants' knowledge regarding psychological aspects of aging and its strategies.

ANALYSIS AND INTERPRETATION**❖ ORGANIZATION OF FINDINGS.**

The analysis and interpretation of the observations are given in the following section:

PRESENTATION OF DATA ANALYSIS

The data collected has been analyzed and presented in the following sections:

SECTION I: Analysis of demographic data of participants, presented in terms of frequency and percentage.

SECTION II: Analysis of pre-test & post-test knowledge scores of geriatric Individuals regarding psychological aspects of aging and its coping strategies.

SECTION III: Effectiveness of the structured Teaching program, by comparing

Pre-test and post –test knowledge score of geriatric individuals, using descriptive and inferential statistics.

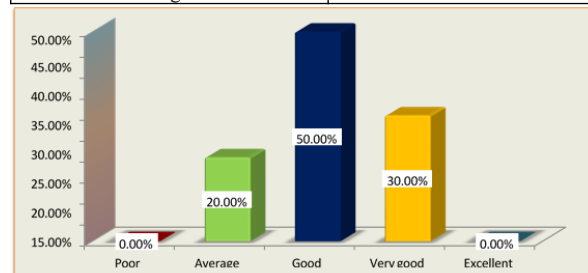
SECTION IV: Association between post –test knowledge score of geriatric individuals with their selected demographic variables, using chi-square test.

Table 1: Section A, showing distribution of participants with regards to demographic variables.

Sr.no.	Variables	Groups	Frequency	Percent %
1.	Age in years.	60-65 years	40	40.00%
		66-71 years	40	40.00%
		72-77 years	18	18.00%
		78 years & above.	02	02.00%
2.	Gender	Male	67	67%
		Female	33	33.00%
		Transgender	00	00
3.	Educational	No formal Education	02	02.00%
		Primary	36	36.00%
		Higher secondary	50	50.00%
		Post Graduate & above.	12	12.00%
4.	Marital status	Single	03	03.00%
		Married	68	68.00%
		Divorced/Widow/ Widower	10	10.00%
		Separated	19	19.00%
5.	Monthly family income	Up to Rs. 10,000	50	50.00%
		Rs.10001 to Rs.30000	37	37.00%
		Rs.30001 to 60000	13	13.00%
		More than Rs.	00	00
6.	Whether getting pension	Yes	55	55.00%
		No	45	45.00%
7.	Religion	Hindu	54	54.00%
		Muslim	10	10.00%
		Buddhist	34	34.00%
		Christian	02	02.00%
		Other	00	00
8.	Type of family	Nuclear	48	48.00%
		Join	52	52.00%
		Extended	00	00
9.	Are you suffering from any systemic disease.	Yes	68%	68.00%
		No	32%	32.00%

Section B: Table 2: Assessment of knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals (Pre-Test) (N=100)

Knowledge Pre-test	Marks	Frequency	Percentage
Poor	1-6	00	0.00
Average	7-12	20	20.00
Good	13-18	50	50.00
Very good	19-24	30	30.00
Excellent	25-30	00	0.00
Minimum Score		07	
Maximum Score		20	
Mean Knowledge Score		13.66±3.002	
Mean % Knowledge Score		45.53±10.01	

**Figure: Distribution of the samples according to knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals (Pre-Test) (N=100)****Table 3: Assessment of knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals (Post-Test) (N=100)**

Knowledge Post-test	Marks	Frequency	Percentage
Poor	1-6	00	0.00
Average	7-12	00	0.00
Good	13-18	25	25.00

Very good	19-24	45	45.00
Excellent	25-30	30	30.00
Minimum Score		15	
Maximum Score		27	
Mean Knowledge Score		20.83±3.091	
Mean % Knowledge Score		69.43±10.30	

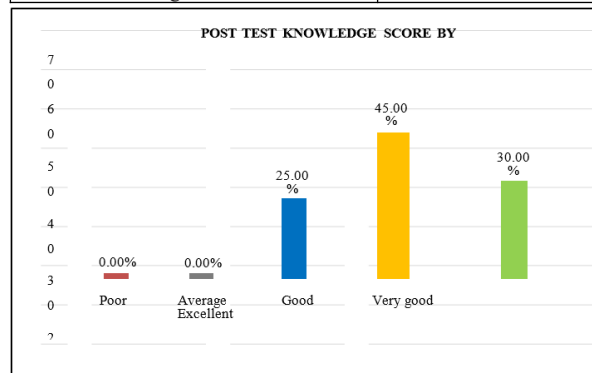


Figure: Distribution of the samples according to knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals (Post-Test) (N=100)

Section c: Table 4: Effectiveness of STP on knowledge score regarding psychological aspects of aging and its coping strategies among geriatric individuals (paired t test) (N=100)

Test	N	Mean	SD	t value	Significance (2 tailed)
Pre-Test	100	13.66	3.002	16.637	0.000
Post test	100	20.83	3.091		

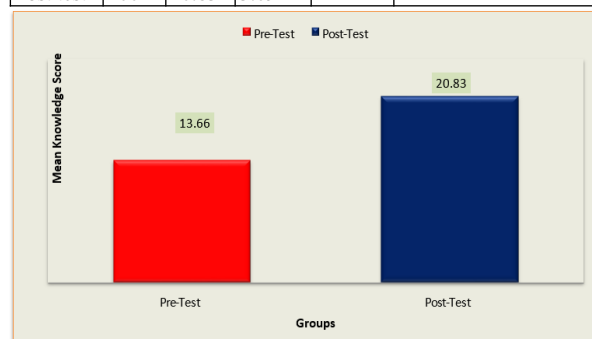


Figure: Effectiveness of STP on knowledge score regarding psychological aspects of aging and its coping strategies among geriatric individuals (paired t test) (N=100)

To assess the effectiveness of the Structured Teaching Program (STP) on knowledge regarding psychological aspects of aging and its coping strategies among geriatric individuals, a paired t-test was conducted. The pre-test average score was 13.66 ± 3.002 , while the post-test average score increased to 20.83 ± 3.091 .

The tabulated t-value for $n = (100 - 1)$, i.e., 99 degrees of freedom, at a 5% level of significance (two-tailed) is 1.984. The calculated t-value was 16.637, and the significance level (p-value) was 0.000.

As the calculated t-value is much higher than the tabulated value at the 5% level of significance, the results are statistically significant. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, confirming that the Structured Teaching Program (STP) was effective in significantly improving participants' knowledge regarding psychological aspects of aging and its coping strategies.

Section D: Table 5: showing association of post-test knowledge score with selected demographic variables (n=100)

Demographic Variables	Chi-square test			Level of Significance	Significance
	Value	DF	P Value		
Age in geriatric individuals	7.10	6	0.007	$P < 0.05$	Significant
Gender	29.87	2	0.01	$P < 0.05$	Significant

Demographic Variables	Chi-square test			Level of Significance	Significance
	Value	DF	P Value		
Education	11.76	6	0.006	$P < 0.05$	Significant
Marital Status	2.07	6	0.074	$P > 0.05$	Non-significant
Monthly family income	9.726	4	0.0018	$P < 0.05$	Significant
Whether getting pension	3.13	4	0.07	$P < 0.05$	Non-significant
Religion	5.177	6	0.521	$p > 0.05$	Non-significant
Type of Family	0.147	2	0.7	$p > 0.05$	Non-significant
Are you suffering from any systemic disease	1.7	2	0.19	$p > 0.05$	Non-significant

DISCUSSION:

The findings of the present study are consistent with those of Ingrand et al. (2018), who reported that a positive perception of aging and the management of psychological distress are key predictors of improved quality of life among the elderly. The study underscores the importance of regular mental health awareness programmes in community settings to promote healthy psychological aging. Additionally, the focus on coping strategies adds to existing literature, as these are essential for enhancing psychological resilience in later life. Following the intervention, participants reported increased confidence and improved ability to cope with life changes, reflecting the effectiveness of the programme in fostering adaptive coping mechanisms. Furthermore, the structured teaching programme demonstrated a significant improvement in participants' knowledge regarding psychological aspects of aging and coping strategies. Prior to the intervention, limited awareness of psychological challenges such as depression, anxiety, and loneliness was observed; however, post-intervention findings revealed a marked enhancement in knowledge levels, highlighting the effectiveness of structured educational interventions in empowering elderly individuals to manage psychological challenges more effectively.

CONCLUSION

After the detailed analysis, the findings of this quasi-experimental study affirm that structured teaching programs are effective in enhancing knowledge regarding the psychological aspects of aging and promoting effective coping strategies among geriatric individuals in urban settings. As the elderly population continues to grow, such interventions will play a crucial role in promoting mental well-being and healthy aging, ultimately reducing the societal and economic burden of geriatric psychological morbidity.

IMPLICATION OF THE STUDY:

- The study emphasizes the role of nurses in addressing psychological aspects of ageing and promoting coping strategies.
- It highlights the need for health education, community awareness, and in-service training due to existing knowledge gaps.
- Nursing administrators can use the findings to plan educational, staff development, and continuing education programmes.
- The study provides a baseline for future research, particularly among urban geriatric populations.

RECOMMENDATION

Future studies may focus on conducting formal education programmes in urban health centres and community settings, involving larger samples to enhance generalizability. Similar studies can be undertaken exclusively among geriatric individuals, including comparative and experimental designs, to assess and evaluate the effectiveness of structured teaching programmes on knowledge regarding psychological aspects of ageing and coping strategies in selected urban areas.

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